

Claims

1. An absorbent structure in an absorbent article such as a diaper, a pant diaper, an incontinence guard, a sanitary napkin or the like, said structure comprising a combination of a porous material such as fibers and/or foam, and superabsorbent material,
characterized in,
that the absorbent structure contains at least 50 % by weight superabsorbent material, based on the total weight of the structure in dry condition in at least one area thereof in which the superabsorbent material is distributed, said superabsorbent material is cross-linked by means of ionic bonds and is in the form of a powder, grains or granules.
2. An absorbent structure as claimed in claim 1,
characterized in,
that the superabsorbent material also is covalently crosslinked.
3. An absorbent structure as claimed in claim 1 ~~or 2~~,
characterized in,
that the superabsorbent material comprises a polymer with anionic functional groups.
4. An absorbent structure as claimed in claim 3,
characterized in,
that the superabsorbent material is a crosslinked polymer of a polyacrylate having functional carboxy groups.
5. An absorbent structure as claimed in ~~any of the preceding claims~~ ^{claim 1},
characterized in,
that the superabsorbent material is crosslinked by cations which by means of ionic bonds are bonded to the anionic functional groups of the superabsorbent material.
6. An absorbent structure as claimed in ~~any of the preceding claims~~ ^{claim 1},
characterized in,

that the cationic crosslinking agent comprises a polyvalent metal ion.)

7. An absorbent structure as claimed in ^{Claim 1} ~~any of the preceding claims~~,
characterized in,

5 that the metal ion is aluminum, zirconium, chrome, titanium or zinc.

8. An absorbent structure as claimed in ^{Claim 1} ~~any of the preceding claims~~,
characterized in,

that the crosslinking agent is an aluminate ion, $\text{Al}(\text{OH})^+$.

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9. An absorbent structure as claimed in ^{Claim 1} ~~any of the preceding claims~~,
characterized in,

that the superabsorbent material is surface crosslinked by the ionic crosslinking agent.

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10. An absorbent structure as claimed in ^{Claim 1} ~~any of the preceding claims~~,
characterized in,

that the superabsorbent material is substantially homogeneously crosslinked with the
ionic crosslinking agent.

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11. An absorbent structure as claimed in ^{Claim 1} ~~any of the preceding claims~~,
characterized in,

that the absorbent structure contains at least 70 % by weight of superabsorbent material,
calculated on the total weight of the structure in dry condition in at least one area
thereof in which the superabsorbent material is distributed.

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12. An absorbent article such as a diaper, a pant diaper, an incontinence guard, a
sanitary napkin or the like of the kind comprising a liquid pervious topsheet, a liquid
impervious backsheet and an absorbent structure enclosed therebetween,
characterized in,

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that the absorbent structure is of the kind stated in ^{Claim 1} ~~any of the claims 1-11~~.

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